

US EPA RECORDS CENTER REGION 5



June 3, 1985

Mr. Don Waltermeyer Ohio EPA Northwest District Office 1035 Devlac Grove Dr. Bowling Green, OH 43402 RECEIVED
JUN 0 1955
OHIO EPA
N. W. D. O.

Dear Mr. Waltermeyer:

Enclosed you will find a copy of the stack particulate samples test performed on our boiler #3, permit number 0374010117 B003.

From my interpretation of these results, it shows that Autolite is well within compliance on allowable sulfur dioxide emissions, but is slightly above standards on the particulate emissions.

Upon looking at the results, test run #1 indicates the worst condition for particulate emission. Run 2 was much better, and run 3, the best. In my opinion, a reasonable explanation for these increasingly better results as time passed, was the fact that we did not give the boiler long enough time to settle out after we had opened up some valves in the distribution system to increase the boiler load, while at this same time, the instruments were messed up, causing erratic control of the boiler.

Enclosed you will find copies of the boiler charts for the days before and after the test, as well as the test day. As you can see, both the day before and the day after the stability of the boiler was much better and I feel confident these days would have been within the emission limits.

Sincerely,

Steve Robinett

Plant Engineering Dept.

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Enclosures

Affiliated Environmental Services, inc.

TABLE I

SUMMARY OF TEST DATA OBTAINED AT AUTOLITE (BENDIX) BOILER #3 EFFLUENT

•	- "	_ "-	** -
	Run #1	Run #2	Run #3
Sampling Date	3-12-85	3-12-85	3-12-85
Barometric Pressure	29.62	29 .62	29.62
Time	0923-1037	1044-1157	1340-1453
1 Inc	0,23 1037	1044 1157	1240 1421
Stack Conditions			
Molecular Weight (Md)			
			•
Orsat Analysis, Dry Basis			
% co ₂	6.2	6.1	6.0
% O2 ⁻	14.0	13.5	14.1
Moisture Content (%)	4.7	4.9	4.7
Diameter	2'x5'	2'x5'	2'x5'
Area (feet ²)	10.0	10.0	10.0
Town Ave ('F)	443	445	438
Temp. Avg. ('F)	29.5	29.2	
Avg. Gas Velocity (f/s)			28.6
Flow Rate (SCFH)	5.84x10 ⁵	5.76x10 ⁵	5.71×10^{3}
Flow Rate (SCFM)	9,740	9,603	9,520
Darticulate Comple Data		٠.	
Particulate Sample Data	275	276	. 275
Sample Nozzle Dia. (inches)	.375	.376	.375
Sample Vol. (SCF)	52.51	51.60	51.68
Sample Time (min.)	72	72	7.2
Isokinicity (%)	97.7	96.8	98.4
Collected (mg)	345.0	276.3	246 .3
Concentration (gr/1000ft ³)	101	82	73
Emission (1h/hr)	8.47	6.80	6.00
Emission (lb/hr) Emission* (lb/106 BTU)	0.458	0.368	
Emission" (10/10° bio)	0.438	0.308	0.324
*based on BTU's produced from	7373 lbs coal us	sed from 0923-14	53
SO ₂			· ·
1b/hr	26.64	25.12	27.52
1 W / 11 h	· · · ·		41.34





